Bilateral Shoulder Dislocation

Bilateral Omuz Çıkığı

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Özet

Amaç: Çalışmamızın amacı nadir görülen bir yaralanma olan bilateral anterior omuz çıkığı ve bu vakalarda gelişebilecek komplikasyonları ve tedavi seçeneklerini olgu sunumu eşliğinde sunmaktır. Gereç ve Yöntem: Düşme sonucu her iki omuz ekleminde hareket kısıtlılığı nedeniyle acil servisimize başvuran 66 yaşındaki kadın hastanın kliniği değerlendirilmiştir. Bulgular: Hastamızın ameliyat öncesi röntgen görüntüleri ve bilgisayarlı tomografi ile ameliyat sonrası röntgen görüntüsü, DASH ve Constant Omuz Skoru ile değerlendirilmiştir. Tartışma: İleri derecede osteoporotik yaşlı hastalarda ve özellikle humerus başının glenoid anterioruna sıkışabileceği durumlarda kapalı redüksiyon denenirken kırık gelişebileceği akılda tutularak dikkatli olunmalı ve olası komplikasyonlar açısından hasta ve yakınları bilgilendirilmelidir. Bu hastalarda anestezi altında kapalı redüksiyonun başarısız olabileceği ve açık redüksiyon gerekebileceği ihtimali akılda tutulmalıdır. Ameliyata internal fiksasyon ve prostetik replasmana yönelik implantları bulundurarak hazırlıklı girmek daha doğru olur.

Anahtar Kelimeler

Bilateral Omuz Dislokasyonu; Omuz Artroplastisi

Abstract

Aim: The aim of this case report is to discuss the evaluation of potential complications and treatment options associated with bilateral anterior shoulder dislocation. Material and Method: The data for this rarely encountered case was collected, during the consultation and treatment phases for a 66-year-old female patient who first presented at the emergency department of Bezmiaiem Vakif University Medical Center with restriction of movements in her both shoulders after falling down the stairs in her home. Results: Evaluation of the patient's pre-operative X-rays and computed tomography (CT scan) images and post operative evaluation of the shoulders was achieved using DASH and the Constant shoulder score. Discussion: Osteoporotic elderly patients and their relatives should be informed of possible complications when considering closed reduction of severe glenoid and humeral head fractures. Instead, an associated risk will most likely necessitate open reduction in this patient population after anesthesia has been administered for closed reduction. Hence, obtaining consent and educating the patient about a possibile need for internal fixation and prosthetic joint replacement using surgical implants should be included in the preoperative consultation and treatment planning session before the patient receives sedation.

Keywords

Bilateral Shoulder Dislocation; Shoulder Arthroplasty

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Introduction

Although anterior shoulder dislocation is the most common major joint dislocation encountered in the emergency department, bilateral glenohumeral dislocations are rare and almost posterior. However, simultaneous bilateral anterior shoulder dislocation is even more rare, only about 30 cases were described in the literature [2] and bilateral anterior shoulder dislocations were reported at eight cases [3]. This report discusses a case involving a 66-years-old woman who sustained traumatic bilateral anterior shoulder dislocation as a result of falling down the stairs in her home. Patient confidentiality was protected and informed consent to describe her case was obtained in accordance with the Declaration of Helsinki and Good Clinical Practices and with approval of the local Ethics Committee of Bezmialem Vakif University Medical Center.

Case Report

A 66-years-old woman was admitted to emergency departemt with pain and restriction of movement on both sides of her shoulder. İnjury was occured simply falling at home, leaning forward with abducted both of her arm. Phisycal examination revealed squared of shoulders without any evidence of neurovascular deficit. Bilateral shoulder dislocation of this patient was proven with X-ray graphy (Figure 1). Right shoulder dislocation

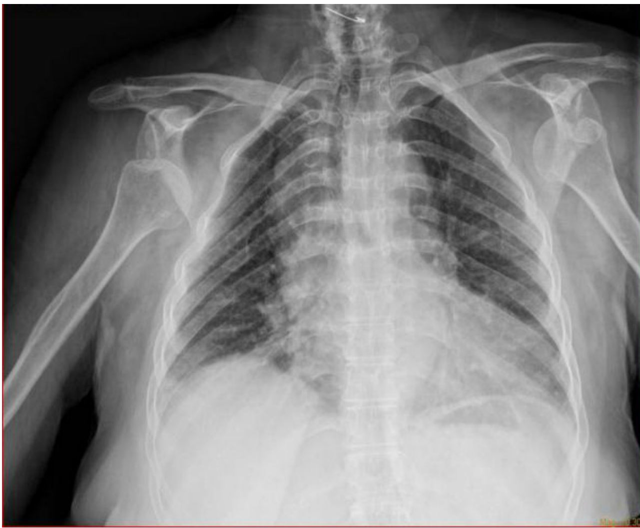

Figure 1. Preoperative X-ray graphy showing bilateral shoulder dislocation

was closed reducted. After then while the closed reduction of the left side, iatrogenic humeral surgical neck fracture occured (Figure 2) and after a computerized tomography the humeral head was seen stucked in the anterior side of axilla (Figure 3). And surgical treatment was planned with endication of hemiar-

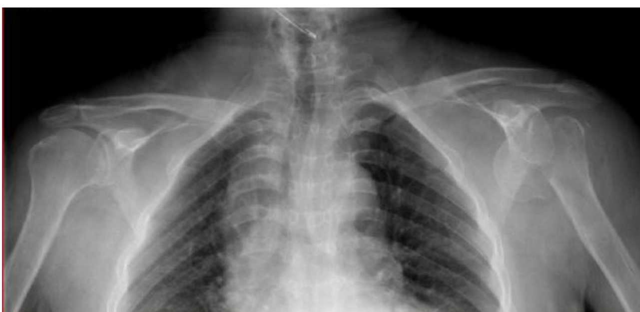

Figure 2. Iatrogenic humeral surgical neck fracture after closed reduction

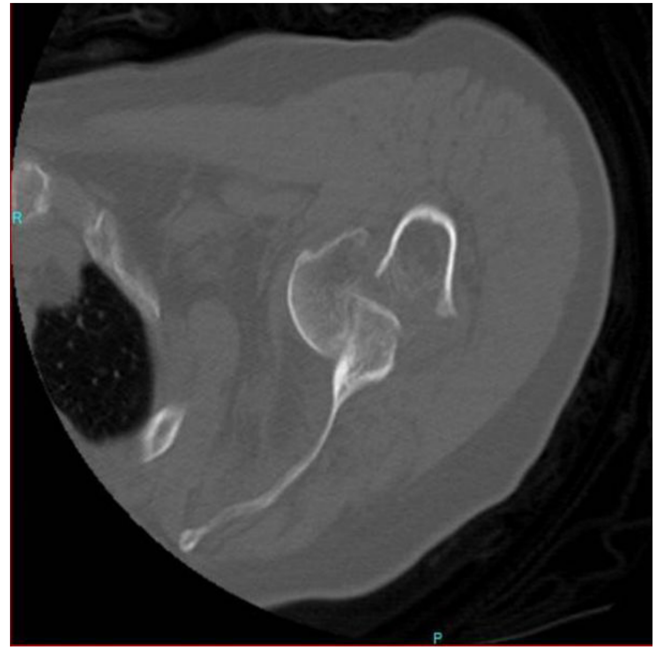

Figure 3. Computerized tomography shows locked humeral head at the anterior side of axilla

troplasty. The partial shoulder prosthesis (Figure 4) was applied with standart deltopectoral incision. Postoperatively early period pendulum and isometric exercises started and the velpau bandage was provided for the patient. At two-months follow-up, right shoulder abduction was 90 degree, anterior flexion was 110 degree; while left shoulder abduction and anterior flexion was 80 degree. İn order the disabilities of the arm, shoulder and hand (DASH) Score and constant shoulder score of the right and left shoulder was 46,7 and 57; 55,8 and 53.

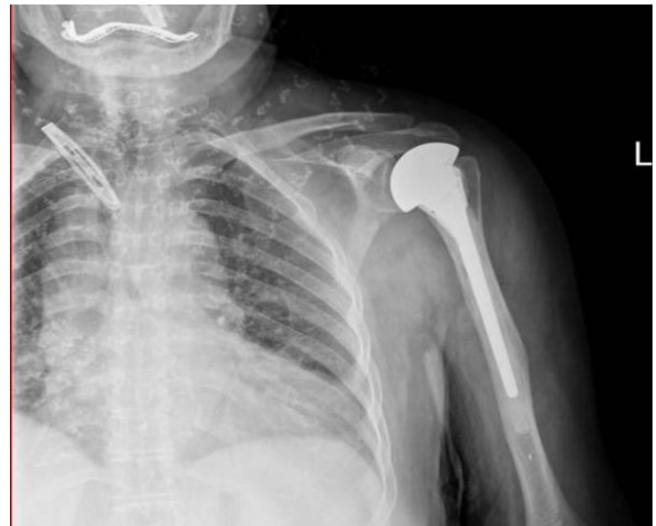

Figure 4. X-ray examination after partial shoulder arthroplasty

Discussion

Shoulder dislocations are the most common major joint dislocations encountered in the emergency departments. They were reported to be 96 % anterior, 3 % posterior and 1 % inferior. However, simultaneus bilateral anterior shoulder dislocation is rare: only about 30 cases have been described in the literature [2] and bilateral anterior shoulder dislocations were reported at eight cases [3]. Bilateral shoulder dislocation was first described in 1902 in a patient with muscular contraciton caused

by camphor overdose. Bilateral shoulder dislocation mechanism is forced extension, abduciton, and external rotation. Brown [4] reported the etiology of bilateral shoulder dislocations as 41 % acute spasm, 23 % trauma, and 36 % non-traumatic injuries. Bilateral shoulder dislocations are rare and almost always posterior [2] and seen usually after trauma, diabetic nocturnal hypoglicemia, grand-mal seizures, sports injuries or electric shocks. Three clinical factors are significantly associated with occurence of fractures in such dislocations: age 40 years or older, the first episode of dislocation, and mechanism of injury. Age is associated with decreased bone mass. The first episode of dislocation signifies an intact ligamentous anatomy around the shoulder joint. Mechanism of injury, such as a fall from height or a motor vehicle accident, are associated with high-energy trauma. After the shoulder joint dislocations; fractures, brachial plexus and axillary nerve injury,vascular and soft tissue damage and recurrent dislocation of the shoulder joint complications are seen. Bilateral shoulder dislocation in elderly patients with radiological examinations should be made and needed a good addition to the tomographic imaging techniques, such as the possible presence of a fissure line, and tubercle fractures also be considered. When attempting closed reduction, keep in mind that severely osteoporotic elderly patients may develop humeral head fractures and the patients and their relatives should be informed of possible complications. While under anesthesia, trying closed reduction; open reduction in these patients should be considered likely to be made. Hence the possibility of a possible fracture; surgical implants for internal fixation and prosthetic replacement have prepared in view is more correct to enter.

Competing interests

The authors declare that they have no competing interests.

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